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ABSTRACT

The report examines the problems, necessary competencies, and inservice needs of those currently employed to teach the disadvantaged and handicapped in vocational/technical schools and programs. The study is based on questionnaire responses of 107 graduate students at Virginia Polytechnic Institute and State University. Of the respondents, 29 percent have masters degrees, 61 percent teach agriculture, business, or home economics; and 63 percent have two to five years of experience teaching the disadvantaged or handicapped. Of the 32 respondents identifying an experience or program which best prepared them for their work, one-half indicated that university courses and work experience both ranked highest. The respondents listed various teaching techniques and curriculum materials including laboratory experience, audiovisual equipment, projects, role playing, open discussions, and guest speakers. Salient teaching problems of the respondents included: students' lack of motivation, poor attendance, and personal problems; deficiencies in instructional materials; and an inability to provide quality instruction to all students. Competencies rated as very important included: knowledge of students' physical, educational, and behavioral characteristics; awareness of appropriate teaching techniques, guidance resources, instructional materials, and laboratory experiences; and practical experience. summary, conclusions, recommendations, and the survey questionnaire are included. (JR)

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IDENTIFICATION OF PROBLEMS AND COMPETENCIES NEEDED BY VOCATIONAL AND TECHNICAL EDUCATION PERSONNEL TEACHING PERSONS WITH SPECIAL NEEDS IN VIRGINIA.

ED112095

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- N. Alan Sheppard

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I. Problem (Description and Background)

Currently there are no special certification requirements for teaching the disadvantaged and handicapped students enrolled in vocational/technical programs. As a result, there are few teacher education programs or courses designed especially for these teachers. Consequently, many vocational teachers are employed to teach the disadvantaged or handicapped persons with little or no professional background in the area of teaching disadvantaged and handicapped students.

The need exists, therefore, to determine the problems and in-service needs of those currently employed to teach the disadvantaged and handicapped in vocational/technical schools and programs. In addition, specific competencies and needs to be demonstrated by vocational/technical teachers need to be identified.

The Vocational Education Amendments of 1968 are very specific in relation to earmarking funds for special programs, services, or activities to serve the disadvantaged or handicapped student. It is recognized that vocational education has a unique contribution to make to the education of these persons. But, while the need for such vocational/technical programs has been expanding, the preparation of personnel to staff such programs has not been expanding; therefore, the staff of programs for the disadvantaged and/or handicapped will not be professionally trained for their responsibilities.

This study was designed to examine some of those competencies teachers perceived as being important in teaching the disadvantaged and/or handicapped persons.

II. Statement of the Problem

The central concern in this investigation was the identification of problems and competencies needed by vocational/technical education teachers when teaching the disadvantaged and/or handicapped in Virginia.

III. Objectives of the Study

A. To identify and examine critically the inservice needs and problems of teachers teaching the disadvantaged and/or handicapped.

B. To identify, by rankings, competencies vocational/technical education personnel perceived as being critical in working with disadvantaged and/or handicapped students.

3. To determine the teaching techniques, resource persons, and/or curriculum materials that are most helpful, as perceived by vocational/technical education personnel, when teaching the disadvantaged and/or handicapped.

IV. Significance of the Study

This survey study was done to provide valuable information about the competencies needed by vocational/technical education personnel, especially beginning vocational/technical education personnel, which teacher education institutions are not providing. Of equal interest in the investigation was an analysis of the problems and needs of persons working with the disadvantaged and/or handicapped.

Information provided by this study will be useful both in revising the present vocational teacher education programs and in designing more appropriate inservice education for teachers of vocational/technical education working with the disadvantaged and/or handicapped.

V. Definition of Terms

Special Needs Students: refers to the broad classification of students who may be either disadvantaged or handicapped and who cannot succeed in the regular vocational/technical education program unless particular modifications are made or the provision for certain services is made.

Disadvantaged Persons: refers to persons who have academic, socio-economic, cultural, or other handicaps that prevent them from succeeding in vocational/technical education or consumer and homemaking programs designed for persons without such handicaps; and who for that reason require specially designed educational programs or related services.

Handicapped Persons: refers to mentally retarded, hard-of-hearing, deaf, speech impaired, visually impaired, seriously emotionally disturbed, crippled, or other health-impaired persons who by reason of their handicapped condition cannot succeed in a vocational or consumer and homemaking education program designed for persons without such handicaps, and who for that reason require special educational assistance or a modified vocational or consumer and homemaking education program.

VI. Review of Literature

There is currently much information available on projects and programs related to the preservice and inservice training of teachers who teach academically and economically disadvantaged students. However, as these projects and programs are studied in depth, they provide little information on what actually happens in the classroom. One of the difficulties in trying to improve teaching for those who are not learning is that little information has been collected and categorized regarding the teacher's behavior and the techniques and methods that are now effectively being used in the classroom. There were a few research studies related to problems of teaching and competencies needed by vocational education personnel who teach special needs students which bear mentioning. Here again, the situation was much the same with relation to effective teaching practices; few studies were focused to any degree of specificity.

It was felt that, for the purposes of the report, a literature search drawing together these generalities would provide a framework whereby more specific teaching practices could be studied. A review of literature and research on inservice and preservice teacher education programs could also reveal commonalities in selected preservice and inservice teacher training programs, which could aid in improving vocational/technical education effectiveness in working with students with special needs.

Green (1967), in a paper prepared for the National Conference on Equal Educational Opportunity in American Cities, cited data from a survey of ten major teacher training institutions which

showed these institutions not realistically facing the problem of providing quality teachers for urban youth. Green believes preservice teacher training programs must include much more direct contact with disadvantaged communities. He also pointed out that the activities in inservice workshops should include observation of master teachers and the possibility of living for a time in depressed neighborhoods. Green feels it is the teacher who is crucial to the success of the inner-city educational program.

The National Education Association, in a recent study, pointed out three areas in which teachers were found to be lacking in their preparation: (1) teaching methods, (2) classroom management routines and discipline, and (3) use of audio-visual equipment and materials (Davis, 1967).

Morrison and Ray (1968) investigated the WEXPO -- 9 Program, an experimental approach to the preparation of elementary teachers for inner-city schools. The project, which encompassed nine teacher preparation institutions in the Detroit area, was designed to better prepare inner-city teachers by introducing them to student teaching in the inner city in their junior year. Assessment of the influence of the preparation on concepts of teaching and learning were derived by observational and instrumentational procedures which assessed teacher behavior to detect changes in teaching patterns throughout the junior year. The investigation concluded that an awareness of the language of teaching concepts and training in observing and interpreting data had a positive effect on teaching behaviors. The student teachers were better prepared for teaching in the inner city than those involved in conventional student teaching programs.

O'Brien (1965) felt that two major considerations were involved in the successful educating of culturally disadvantaged youth. First, it was necessary to determine the characteristics of effective teachers of the disadvantaged; and second, it was necessary to determine the role of course work in curriculum and methodology in the preservice preparation of teachers of the disadvantaged.

Clifford's (1964) analysis of literature and studies related to research and experimentation revealed that middle-class educational techniques were inadequate in reaching the lower-class child. Disadvantaged students developed their own language pattern, thus making teacher-student communication difficult. Clifford concluded that teachers in preservice and inservice educational programs should be trained to understand the cultural patterns of the group they will be teaching. Clifford's study also showed that personality development in the culturally deprived children was based on a series of self-concepts which enable the children to understand their own abilities. Lower-class children were best motivated by relating curriculum materials to their own needs. Clifford further found that the vast majority of public school experimental programs located in urban areas train teachers in techniques which allow children to express themselves. The teachers learned by working in a team-teaching situation and using new teaching materials.

Closely related to the need for better preservice training is the necessity of providing more and better inservice training for teachers in special needs programs. Unless teachers already staffed

in special needs programs become more effective, better trained teachers coming to the schools will have little permanent impact on students and will ultimately leave the school setting or reduce their level of effort. One of the major recommendations of the Washington School Survey of 1966-67 was that a substantial part of the teacher's time, as well as that of all other school professionals, should be devoted to continuing inservice work designed to upgrade knowledge. (Passow, 1967)

Project Beacon at Yeshiva University exposed students to a preservice teaching curriculum emphasizing the social, developmental and learning problems of the disadvantaged. (Gordon and Wilkerson, 1966). A similar teacher-training project was Project Y003 developed and implemented at Coppin State College in Maryland. This one-year experimental program was developed to determine if inter-cultural misunderstandings in inner cities could be eliminated by seeking out prospective teachers from among the ethnic and cultural groups served and then preparing these teacher candidates for work in urban schools. Nineteen Coppin juniors and seniors were perceived to have the academic and personal characteristics necessary for quality teachers. In addition to field experiences, the students were offered courses in the sociology of the city, minority people, history of the Negro in America, and education of the culturally different. The objective to be met by the curriculum was to deepen within the students the understanding of the positive values that inhere in the subcultures of American life. Seminars held for prospective teachers featured lectures by members of minority groups

who were from disadvantaged backgrounds and who had succeeded. Urban parents and leaders were invited to the lectures. Supervising teachers in the schools selected for student-teaching experiences were enrolled in a summer institute to insure that their attitude and behavior toward disadvantaged children were appropriate. (Green, 1967)

In a rather bold teacher-education experiment, Antioch College (Fairfield, 1967), in conjunction with the District of Columbia Public Schools, developed and implemented a teacher-training program through which intern teachers, experienced teachers, and supervisors were simultaneously trained. Like so many other preservice teacher-training programs for urban teachers, this unique effort lacked an adequate research and evaluation component.

Feck (1972) found in a study focusing on research and programs pertaining to teaching disadvantaged and handicapped that 30 of 35 respondents felt that the most necessary competency for teachers to have was the ability to diagnose learning problems and needs of the disadvantaged and/or handicapped youth. Twenty-one felt that a knowledge of the characteristics of the disadvantaged and handicapped was second in importance. In the same study vocational teachers felt that on a day-to-day basis, the greatest problem they encountered was that of motivating the disadvantaged and/or handicapped; the next problem they listed was lack of time.

Hatton (1970), in addressing the Third Annual National Vocational-Technical Teacher Education Seminar on teaching disadvantaged youth listed some of the following factors as being crucial in preparing vocational teachers to be effective in an inner-city school:

1. Require more guidance and counseling courses, more than just an offering of adolescent psychology that describes problems but does not tell us how to handle them.

2. Require additional courses in how to teach remedial grammar, reading, and arithmetic. We have specialists in our schools for the very deficient students, but what can one do with 2,700 students in the school body!

3. Teaching does not come natural to most of us. The teacher placed in the inner-city school should be tops. We have broken in many new teachers; and then the suburbs soon attract them with their talents, and we start all over again with new material to break in again.

4. Training in an outer-city or suburban school should not qualify one to teach in an inner-city school. My college training was based on the former two. I have felt my way along, as many others are doing now. Subject matter should stay the same, but methods of presentation are very different.

Whitter (1970) in writing on the subject of what makes an effective vocational education teacher in an inner-city school (from a supervisor's point of view) wrote:

> "Teachers who are humane, who accept their pupils as worthwile human beings, who plan for individual students, who have faith in the ability of their pupils to learn, who use their pupils time profitably, who provide short-term or sub-goals, and capitalize on the strengths of the pupils are the people that supervisors would like to see in every inner-city school classroom. Training programs that will prepare teachers to function in this manner are desperately needed if education is ever to achieve its promise to help all of the people to live a richer life."

The ingredients of any educational system include teachers, buildings, facilities, curriculum, and programs. Most studies show that the quality of these ingredients in rural schools, when compared to urban schools, is low. Because of low salaries, rural schools are unable to attract and hold the better qualified teachers.

Kopp (1970), in an article on serving the rural disadvantaged, said:

> "...It is easy to get the impression that occupational education for the disadvantaged concerns urban areas only. The inner-city problems of education, including those of occupational education, seem to be studied endlessly. One wonders then, what about occupational education for the disadvantaged in rural settings?..."

Breathill (1967) points to the youth of rural America and states that because of economic deprivation, inadequate health facilities, and unequal educational opportunity, rural youth have generally failed to realize the advantages of their city counterparts.

It is indeed difficult for rural people--being handicapped educationally and isolated physically, socially, psychologically, and culturally--to acquire new skills or to get new jobs. And, the problems of teaching rural special needs youth become compounded.

The need is tremendous for vocational education teachers who can function in the cultural environment of rural America.

There are several ambitious and innovative programs being proposed to up-date teacher education. These kinds of teacher-training programs represent a new thrust in teacher education programs and, while they seem to smack at abrasive and disruptive change, they are not unprecedented. In another era there was a shortage of teachers for rural America. In response to this acute shortage and demand for rural teachers, state departments of education established special institutions such as the "normal school" so rural people could be trained to teach.

Given the present failure of our teacher training programs to adequately prepare teachers to teach the disadvantaged and handicapped in rural and urban areas, it is likely that such models will become widespread.

This brief literature review revealed with little doubt the great need for research in the area of what actually happens in the classroom as well as the need to examine what teachers themselves believe make them successful when they function in a given school setting. The findings of the study contained in this report attempted to provide data to be used as the basis or framework for a sound preservice or inservice teacher education program for vocational/technical education teachers.

VII. Basic Assumptions

The following assumptions, based primarily on logical reasoning and empirical evidence, were the foundation upon which the study was structured; thusly, these assumptions served as guides for the study in the absence of testable hypotheses:

1. It was assumed that the respondents were in a position to be aware of inservice needs and problems teaching persons with special needs as a result of their daily interactions with these persons.

2. It was further assumed that teachers' rankings of competencies needed in order to be effective with disadvantaged and/or handicapped persons would have strong implications for designing preservice and inservice programs.

3. It was further assumed that respondents' rankings were to a large degree a function of teaching experience.

4. It was also assumed that vocational/technical education personnel working with persons with special needs would provide candid and honest responses of their experiences and encounterances with these persons.

VIII. Methodology

A survey questionnaire was designed for the purpose of soliciting information from vocational/technical teachers, administrators, and counselors on: (1) problems encountered in teaching disadvantaged and/or handicapped students, (2) competencies needed by vocational education personnel, and (3) teaching strategies, resources, and curriculum materials perceived as being the most effective in working with students with special needs.

The primary target groups were the teachers teaching special needs students in programs supported by funds from Part B and Special Disadvantaged Programs (102b)--both provisions are made possible by the Vocational Amendments of 1968.

The questionnaire was administered to 108 vocational education personnel. These respondents were selected for the study as a result of being chosen as E. P. D. A. awardees. Each E. P. D. A. awardee was selected to enroll in EDVT 5680--Vocational and Technical Education for the Disadvantaged. This is a three-hour graduate course offered through the Division of Vocational and Technical Education, VPI & SU, Blacksburg, Virginia.

The instrument was pilot tested for ambiguity using graduate students in vocational education at VPI & SU.

The method of data analysis included the BMD04D (Health Sciences Computing Facility, UCLA) alphanumeric frequency count, the BMD03D to examine measure of correlation, and the Spearman rank correlation coefficient.

Some portions of the survey instrument were examined without the use of the computer facilities since the open-ended nature of a few items did not sumbit well to computerization.

IX. Analysis of Results and Interpretation of Data

A. General Information

The survey instrument was administered to 108 vocational administrators, teachers and counselors. One questionnaire was incomplete and inapplicable, therefore, a total of 107 questionnaires were included in this descriptive study.

A description of the survey subjects' educational, work-experience background and classroom situation is given below in categorical form.

Survey Subjects' Field of Specialization and Degree(s) Obtained:

Thirty-one (31), or 29 percent, of the 107 survey subjects have masters degrees and 66, or 61 percent, of the 107 survey subjects listed agricultural education, business education, or home economics education as their major field of specialization. A further breakdown of fields of specialization of the survey subjects and degree(s) obtained by them is shown in Table 1, pages 14 and 15 .

Number of Teachers at Various Levels of Instruction:

Elementary:	6
Secondary:	80
Post-Secondary:	12
*NA	9

*NA: Particular Questionnaire Item Not Completed

TABLE I

DEGREE(S) OBTAINED BY AND FIELD OF
SPECIALIZATION OF VOCATIONAL EDUCATION PERSONNEL

No. of Teach-ers	Bachelor's Degree	And	Master's Degree
22	Agricultural Education		
1	Agricultural Education	And	Administration
6	Agricultural Education	And	Agricultural Education
1	Animal Science		
2	Business Administration		
1	Business Administration	And	Guidance & Personnel
1	Business Administration	And	Sec. School Administration
1	Business Administration	And	Vocational Education
12	Business Education		
4	Business Education	And	Business Education
2	Business Education	And	Guidance
1	Chemistry	And	Guidance & Counseling
1	Distributive Education	And	Guidance & Counseling
1	Distributive Education	And	Public School Administration
1	Economics		
1	Elementary Education		
1	Health Occupations		
17	Home Economics Education		
1	Home Economics Education	And	Adult Education
1	Home Economics Education	And	Home Economics Education
7	Industrial Arts Education		
2	Industrial Arts Education	And	Admin. & Supervision

TABLE I (Continued)

DEGREE(S) OBTAINED BY AND FIELD OF
SPECIALIZATION OF VOCATIONAL EDUCATION PERSONNEL

No. of Teach-ers	Bachelor's Degree	And	Master's Degree
1	Industrial Arts Education	And	Industrial Arts Education
1	Industrial Arts Education	And	Junior College Administration
1	Industrial Arts Education	And	Rehabilitation Counseling
1	Industrial Electronics	And	Career & Technology Education
1	T & I Education		
1	Language and Literature		
1	Math		
1	Math	And	Admin. & Psychology
1	Nurse (R. N.)		
3	Nursing		
1	Nursing	And	Nursing
1	Political Science		
1	Science		
1	Sociology	And	Admin. & Supervision
1	Sociology	And	Guidance
2	Vocational Education		

Number of Teachers and Commensurate Years of Teaching Experience:

Elementary Teachers:

1 Year or Under:	1
2 - 5 Years:	3
6 Years or Over:	2

Secondary Teachers:

1 Year or Under	10
2 - 5 Years:	39
6 Years or Over:	30
*NA	10

Post-Secondary Teachers:

1 Year or Under:	3
2 - 5 Years:	6
6 Years or Over:	3

Number of Teachers with the Following Number of Years Teaching the Disadvantaged and/or Handicapped Students

1 Year or Under:	16
2 - 5 Years:	57
6 Years or Over:	17
*NA	17

Number of Teachers Teaching in Self-Contained Class (Disadvantaged and/or Handicapped Students are Not Taught with "Regular" Students in the Same Classroom) or Regular Classroom Situation (Disadvantaged and/or Handicapped Students are in the Same Classroom and are Taught Together.)

Self-Contained Class:	23
Regular/Mixed Class:	68
*NA	16

Number of Teachers with the Following Class Sizes (Number of Students in the Class):

1 - 5 Students:	2
6 - 10 Students:	5
11 - 15 Students:	24
16 + Students:	71
*NA	5

*NA: Particular Questionnaire Item Not Completed

Number of Teachers Who Teach the Following Types of Students:

Disadvantaged:	65
Handicapped:	1
Disadvantaged and Handicapped:	27
Neither Disadvantaged nor Handicapped:	5
*NA	9

Number of Teachers and Age Category of Students Taught:

10 Years of Age or Under:	3
11 or 12 Years of Age:	0
13 or 14 Years of Age:	25
15 or 16 Years of Age:	39
17 + Years of Age:	32
*NA	8

Number of Teachers and Grade Levels Taught:

Level:	Fifth Grade or Under:	5
	Sixth or Seventh Grade:	2
	Eighth or Ninth Grade:	38
	Tenth or Eleventh Grade:	34
	Twelth Grade or Higher:	17
	*NA	11

Summary of General Information about Vocational Education Personnel Participating in the Study

- Twenty-nine percent (29%) of the 107 survey subjects have a master's degree
- Sixty-one percent (61%) of the survey subjects are in agricultural education, business education, or home economics education
- Eighty-one percent (81%) of the survey subjects are teaching on the secondary level
- Forty-six percent (46%) of the survey subjects have had two to five years' teaching experience on the secondary level
- Thirty-five percent (35%) of the survey subjects have had six or more years' teaching experience on the secondary level
- Sixty-three percent (63%) of the survey subjects have had two to five years of experience teaching the disadvantaged and/or handicapped

*NA: Particular Questionnaire Item Not Completed

- Seventy-five percent (75%) of the survey subjects are teaching in a mixed classroom (disadvantaged and/or handicapped students are in the same classroom with regular students)
- Seventy percent (70%) of the survey subjects have a class size of 16 or more students
- Thirty-nine percent (39%) of the survey subjects teach students who are 15 or 16 years of age
- Thirty-two percent (32%) of the survey subjects teach students who are 17 years of age and over

B. Programs and/or Experiences Which Best Prepared Vocational Education Personnel for Present Position (Working with the Disadvantaged and/or Handicapped)

In order to determine the programs and/or experiences which best prepared the survey subjects for their positions of working with the disadvantaged and/or handicapped, they were asked to: (1) examine the list of items shown below, (2) select those items (programs or experiences) which they had participated in or experienced, and (3) rank these selected items (the item which best prepared them for working with the disadvantaged and/or handicapped was to be ranked 1, etc.)

The list of items to be ranked appeared on the questionnaire as follows:

( ) In-service program related to disadvantaged and handicapped sponsored by local school system

( ) In-service program related to disadvantaged and handicapped sponsored by State Department

( ) In-service program related to disadvantaged and handicapped sponsored by a university

( ) University courses in special education

( ) University courses in _____(specify area)

( ) Intern teaching experience in disadvantaged and/or handicapped programs

( ) Your own readings on disadvantaged and/or handicapped

( ) Consultants

( ) Military experience

( ) Other--Industry, Business, etc. _____(Specify)

This list was filled in and ranked by 32, or 30%, of the 107 survey subjects. This low percentage would suggest that (1) only a minority of survey subjects have had some educational and/or personal background experience(s) which have been beneficial to them when working with the disadvantaged and/or handicapped or (2) the majority of survey subjects have had no educational and/or personal background experiences in preparing them to work with the disadvantaged and/or handicapped.

An analysis of how these programs and/or experiences were ranked by the survey subjects is shown in Tables II, III, and IV.

Table II, page 20 , lists all the programs or experiences which were ranked 1, 2,...7. All programs or experiences which received a rank of 1 (indicating the program or experience which best prepared the survey subject for his/her present position of working with the disadvantaged and/or handicapped) are listed under Rank Level 1; all programs or experiences which received a rank of 2 are listed under Rank Level 2; etc. Table II also shows how many survey subjects ranked a particular program or experience. Not all Levels of Rank (Rank Level 1, Rank Level 2, etc.) will have 32 responses because many survey subjects had only one or two program(s) or experience(s) which related to preparing them for their present position of working with the disadvantaged and/or handicapped.

TABLE II

RANKING OF PROGRAMS AND/OR EXPERIENCES WHICH BEST PREPARED VOCATIONAL EDUCATION PERSONNEL TO WORK WITH THE DISADVANTAGED AND/OR HANDICAPPED

Prog. or Experience receiving Rank No.:	Experiences and/or Program	No. of Subj(s). Who Ranked Specific Prog. or Experience
Rank Level 1		
*1	University Courses on:	
	a. Adult education	5
	b. Disadvantaged child	1
	c. Early childhood development	1
	d. Educating the disadvantaged	2
	e. Industrial arts	1
	Total Survey Subjects Ranking University Courses No. 1	10
1	Other: Work Experience	6
1	Intern teaching experience in disadvantaged and/or handicapped programs	3
1	Your own readings on disadvantaged and/or handicapped	3
1	In-service program relating to disadvantaged and/or handicapped sponsored by local school system	3
1	In-service program related to disadvantaged and/or handicapped sponsored by State Dept.	2
1	In-service program related to disadvantaged and/or handicapped sponsored by a university	2
1	University courses in Special Education	2
1	Consultants	1

*1-That specific experience, program, or position (selected by subject from list) which best prepared survey subject(s) to work with the disadvantaged and/or handicapped.

TABLE II (Continued)

RANKING OF PROGRAMS AND/OR EXPERIENCES WHICH BEST PREPARED VOCATIONAL EDUCATION PERSONNEL TO WORK WITH THE DISADVANTAGED AND/OR HANDICAPPED

Prog. or Experience receiving Rank No:	Experiences and/or Program	No. of Subj(s). Who Ranked Specific Prog. or Experience
Rank Level 2		
2	Your own readings on disadvantaged and/or handicapped	8
2	In-service program related to disadvantaged and/or handicapped sponsored by local school system	4
2	Interm teaching experience in disadvantaged and/or handicapped programs	4
2	University courses on:	
	a. Psychology	1
	b. Reading	1
	c. Vocational education	1
	Total Survey Subjects Ranking These University Courses No. 2	3
2	In-service program related to disadvantaged and/or handicapped sponsored by State Dept.	2
2	Consultants	1
2	In-service programs related to disadvantaged and/or handicapped sponsored by a university	1
2	Military experience	1
Rank Level 3		
3	Your own readings on disadvantaged and/or handicapped	6
3	Consultants	2
3	Military experience	2

TABLE II (Continued)

RANKING OF PROGRAMS AND/OR EXPERIENCES WHICH BEST PREPARED VOCATIONAL EDUCATION PERSONNEL TO WORK WITH THE DISADVANTAGED AND/OR HANDICAPPED

Prog. or Experience receiving Rank No.:	Experiences and/or Program	No. of Subj(s) Who Ranked Specific Prog. or Experience
3	In-service program related to disadvantaged and/or handicapped sponsored by local school system	1
3	In-service program related to disadvantaged and/or handicapped sponsored by State Dept.	1
3	Intern teaching experience in disadvantaged and/or handicapped programs	1
3	University courses in Special Education	1
Rank Level 4		
4	In-service program related to disadvantaged and/or handicapped sponsored by State Dept.	2
4	In-service program related to disadvantaged and/or handicapped sponsored by local school system	2
4	Your own readings on disadvantaged and/or handicapped	2
4	University courses in: a. Agricultural education	2
4	Consultants	1
4	In-service program related to disadvantaged and/or handicapped sponsored by a university	1
4	Other: a. In-service director	1

TABLE II (Continued)

RANKING OF PROGRAMS AND/OR EXPERIENCES WHICH BEST PREPARED VOCATIONAL EDUCATION PERSONNEL TO WORK WITH THE DISADVANTAGED AND/OR HANDICAPPED

Prog. or Experience receiving Rank No.:	Experiences and/or Program	No. of Subj(s). Who Ranked Specific Prog. or Experience
Rank Level 5		
5	In-service program related to disadvantaged and/or handicapped sponsored by local school system	1
5	Military experience	1
5	Your own readings on disadvantaged and/or handicapped	1
5	University courses on: a. Guidance	1
5	University courses in Special Education	1
Rank Level 6		
6	Consultants	1
6	Military experience	1
6	Other: a. Personal experience	1
6	University courses in Special Education	1
Rank Level 7		
7	Other: a. Sunday School materials	1

Table III, Page 25 , lists the program or experience in Rank Level 1, 2, and 3 which received the most survey subject responses.

Table IV, page 26 , lists the number of survey subject responses received by each program or experience.

Summary of Ranking By Survey Subjects of Program(s) and/or Experience(s) Which Best Prepared Them for Working with the Disadvantaged and/or Handicapped

Those programs or experiences which were given a *rank of 1 and which received 50% of the 32 survey subjects' (vocational education personnel) responses were: (1) university courses and (2) other: work experience.

University courses. University courses on adult education, industrial arts, teaching the disadvantaged, and childhood development were ranked number 1 by 31% of the survey subjects (vocational education personnel who ranked a list of programs and experiences which best prepared them for working with the disadvantaged and/or handicapped.)

Other: Work experience. Nineteen percent (19%) of the survey subjects ranked work experience as being number 1.

Programs and experiences which were ranked number 1 and which received the remaining 50% of the survey subjects' responses were: intern teaching experience in disadvantaged and/or handicapped programs; your own readings on disadvantaged and/or handicapped; in-service program relating to disadvantaged and/or handicapped sponsored by the local school system, in-service

*programs or experiences ranked number 1 were considered by vocational education personnel to be those programs and experiences which best prepared them for working with the disadvantaged and/or handicapped

TABLE III

*PROGRAM OR EXPERIENCE MOST FREQUENTLY LISTED BY VOCATIONAL EDUCATION PERSONNEL UNDER RANK LEVEL 1, RANK LEVEL 2, AND RANK LEVEL 3

Rank Level	Experience and/or Program	No. of Subj(s). Who Ranked Specific Prog. or Experience
1	University courses on:	
	a. Adult education	5
	b. Disadvantaged child	1
	c. Early childhood development	1
	d. Educating the disadvantaged	2
	e. Industrial arts	1
		10
2	Your own readings on disadvantaged and/or handicapped	8
3	Your own readings on disadvantaged and/or handicapped	6

Rank levels 4-7 were not listed in the foregoing table because no specific program or experience under each of these levels received a majority of survey subject responses.

*This table is a further analysis of ranking of programs and/or experiences which best prepared vocational education personnel to work with the disadvantaged and/or handicapped. See Table II. Programs or experiences which best prepared survey subjects for working with the disadvantaged and/or handicapped were listed under Rank Level 1; those programs or experiences considered secondly by the survey subjects as best preparing them for working with the disadvantaged and/or handicapped were listed under Rank Level 2, etc.

TABLE IV

*NUMBER OF TIMES THE FOLLOWING PROGRAMS AND EXPERIENCES WERE LISTED BY VOCATIONAL EDUCATION PERSONNEL AS BEING IMPORTANT IN PREPARING THEM TO WORK WITH THE DISADVANTAGED AND/OR HANDICAPPED

Program and/or Experiences	Responses Received
University courses on:	
a. Adult education	5
b. Disadvantaged child	1
c. Early childhood development	1
d. Educating the disadvantaged	2
e. Industrial arts	1
f. Psychology	1
g. Reading	1
h. Vocational education	1
i. Special education	5
j. Guidance	1
k. Agricultural education	2
	21
Your own readings on the disadvantaged and/or handicapped	20
In-service program related to disadvantaged and/or handicapped sponsored by the local school system	11
Other:	
a. Work experience	6
b. In-service director	1
c. Personal experience	1
d. Sunday School	1
	9
Intern teaching experience in disadvantaged and/or handicapped programs	8
In-service program related to disadvantaged and/or handicapped sponsored by the State Department	7
Consultants	6
Military experience	5
In-service program related to disadvantaged and/or handicapped sponsored by a university	4

* See Page ____

program related to disadvantaged and/or handicapped sponsored by a university; in-service program related to disadvantaged and/or handicapped sponsored by the State Department; University courses in Special Education, and Consultants.

The only program or experience which did not receive a rank of number 1 was military experience.

Those programs and experiences which were ranked number 2 and which received 67% of the 24 survey subjects' responses were: (1) your own readings on disadvantaged and/or handicapped and (2) in-service program related to disadvantaged and/or handicapped sponsored by local school system, and (3) intern teaching experience in disadvantaged and/or handicapped programs.

The item which was ranked number 3 and which received 43% of the 14 survey subject responses was your own readings on the disadvantaged and/or handicapped. The other rank levels are not summarized as they only contained 11 or fewer survey subject responses.

An analysis of those experiences and/or programs which were ranked number 1, 2, or 3 clearly suggests that university courses (on various topics), survey subjects' own readings on the disadvantaged and/or handicapped, and in-service programs related to disadvantaged and/or handicapped sponsored by local school systems have best prepared the majority of the survey subjects (vocational education personnel) for working with the disadvantaged and/or handicapped.

The programs or experiences which received the least number of survey subject responses were: in-service program relating to disadvantaged and/or handicapped sponsored by a university, military experience, consultants, in-service program relating to disadvantaged and/or handicapped sponsored by the State Department, and intern teaching experience in disadvantaged and/or handicapped programs.

C. Teaching Techniques, Resource Persons, and/or Curriculum Materials Found to be Most Helpful by Vocational Education Personnel When Working with the Disadvantaged and/or Handicapped

One question on the questionnaire is: "What teaching techniques, resource persons, and/or curriculum materials have you found in general to be most helpful in working with handicapped or disadvantaged youth?" The answers given by the survey subjects and the frequency of answers are shown in Table V, pages 29 to 31 .

Those techniques, resource persons, and/or curriculum materials listed by ten or more survey subjects are:

audio-visual aids
demonstration method of teaching
field trips
films
games
hands-on activities
individualized instruction
guest speakers

Demonstration method of teaching and individualized instruction, two methods of teaching, received over 20 survey subject responses; audio-visual aids, field trips, and films received 15 to 18 survey subject responses; and games, hands-on activities, and guest speakers received 11 to 14 survey subject responses.

TABLE V

TEACHING TECHNIQUES, RESOURCE PERSONS, AND/OR CURRICULUM MATERIALS FOUND TO BE MOST HELPFUL BY VOCATIONAL EDUCATION PERSONNEL WHEN WORKING WITH THE DISADVANTAGED AND/OR HANDICAPPED

Techniques, Resource Persons, Curriculum Materials (In Alphabetic Order)	No. of Times Listed by Survey Subj(s)
Activity-centered lessons	1
Audio-(Self-Study)units	1
Audio-visual aids	18
CAI (computer assisted instruction)	1
Case studies	1
Contests	1
Contract learning	1
Competitive acts	1
Club	1
Demonstration method of teaching	23
Exhibits	1
Experiments	1
Extension bulletins	1
Field trips	16
Films	15
Film strips	9
Games	11
Hands-on activities	11
Home visitation	2
Hospital inservice programs	1
Individualized instruction	22
Lab and shop experience	9
Learning by doing	1
Learning about students' background	1
Lecture followed by practice	1
Open discussion	5
Oral examinations	1
Overhead projector	6
Panel discussion	1
Practical experience	1
Projects	8
Publications	1
Questionnaires	1
Raising money for field trips	1
Rapping (bull session)	2
Reading assignments	1
Repetition	1
Role playing	8
Show & tell	1
Short class duration	1
Skill emphasis	1

TABLE V (Continued)

TEACHING TECHNIQUES, RESOURCE PERSONS, AND/OR CURRICULUM MATERIALS FOUND TO BE MOST HELPFUL BY VOCATIONAL EDUCATION PERSONNEL WHEN WORKING WITH THE DISADVANTAGED AND/OR HANDICAPPED

Techniques, Resource Persons, Curriculum Materials (In Alphabetic Order)	No. of Times Listed by Survey Subj(s).
Slow Pace	1
Slides	3
Speakers (guest)	14
Stating behavioral objectives	1
Students working together	7
Study guides	1
Tape recorder	1
Teacher-made materials	1
Testing	1
Trial & error	1
Tutoring	2
Video-tape equipment	1
Work experience	1
Work packets	1
Workbooks	1
Workshops	1

TABLE VI

TYPES OF TEACHING TECHNIQUES, RESOURCE PERSONS, AND/OR CURRICULUM MATERIALS FOUND TO BE MOST HELPFUL BY VOCATIONAL EDUCATION PERSONNEL WHEN WORKING WITH THE DISADVANTAGED AND/OR HANDICAPPED

Teaching Techniques, Resource Persons, Curriculum Materials/Equip.

Teaching Methods and Techniques

Methods:

a. case studies; learning about student's background
b. demonstration; skill emphasis
c. field trips; raising money for field trips
d. games
e. individualized instruction
f. lab and shop experience; practical experience; work experience
g. projects
h. lecture followed by practice
i. open discussion
j. panel discussion
k. role playing
l. show & tell
m. tutoring

Techniques:

a. activity-centered lessons
b. audio- (self-study) units
c. contests
d. contract learning
e. competitive activities
f. club
g. exhibits
h. experiments; workshops
i. extension bulletins; publications; questionnaires
j. hands on activities; learning by doing; trial and error
k. home visitation
l. oral examinations
m. rapping
n. reading assignments
o. repetition
p. short class duration
q. slow pace
r. stating behavior objectives
s. students working together
t. testing
u. workshops

TABLE VI (Continued)

TYPES OF TEACHING TECHNIQUES, RESOURCE PERSONS, AND/OR CURRICULUM MATERIALS FOUND TO BE MOST HELPFUL BY VOCATIONAL EDUCATION PERSONNEL WHEN WORKING WITH THE DISADVANTAGED AND/OR HANDICAPPED

Techniques, Resource Persons, Curriculum Materials/Equipment
Resource Persons:
a. Guest Speakers
Curriculum Materials/Equipment
a. audio-visual aids
b. CAI (computer assisted instruction)
c. films
d. film strips
e. overhead projector
f. slides
g. study guides
h. tape recorder
i. teacher-made materials
j. video-tape equipment
k. work packets
l. workbooks

Table VI , page 31 , gives a further breakdown of the teaching techniques, resource persons, and/or curriculum materials found to be most helpful by vocational education personnel when working with the disadvantaged and/or handicapped. Types of teaching techniques, resource persons, and/or curriculum materials are categorized under teaching methods and techniques, resource persons, and curriculum materials and equipment.

D. Persistent Problems Encountered by Vocational Education Personnel When Working with the Disadvantaged and/or Handicapped

The survey subjects were asked to list their greatest problem they encountered when working with the disadvantaged and/or handicapped on a day-to-day basis.

Problems listed by the survey subjects are shown in Table VII, pages 34 to 36 . These problems are categorized under these heading: problems which relate to the student; problems which relate to vocational education personnel; and problems which relate to the classroom, curricula, and instructional materials.

The following are specific problems which were listed by several vocational education personnel as being the greatest problem encountered when working with the disadvantaged and/or handicapped: (1) students' lack of motivation, (2) students' poor attendance, (3) students' personal problems, (4) vocational education personnel's lack of instructional materials and packages, (5) vocational education personnel's inability to provide quality instruction to all students, and (6) inability of regular textbook materials reaching each student.

TABLE VII

PROBLEMS (RELATING TO THE STUDENTS, THE TEACHER, THE CLASSROOM, THE CURRICULA, AND THE INSTRUCTIONAL MATERIALS) ENCOUNTERED BY VOCATIONAL EDUCATION PERSONNEL WHEN WORKING WITH THE DISADVANTAGED AND/OR HANDICAPPED

Problems Encountered by Vocational Education Personnel When Working with the Disadvantaged and/or Handicapped
Problems Which Relate to the Student
. student behavior problems and poor attitude; students who need help do not believe they need it
. discipline problems
. students cannot apply what he learns (problem of transfer)
. students are not concerned or interested in making future plans
. students do not have a healthy "self-image"
. students' desire for peer group acceptance
* . students' lack of motivation; difficult to keep them interested and motivated for the entire class period
* . poor student attendance
* . students' personal problems which interfer with their learning
. students' low reading ability
. students are unable to work independently
Problems Which Relate to Vocational Education Personnel
. Vocational education personnel's lack of time for:
. planning
. self-improvement
. research
. home visits
. individualized instruction
. Vocational education personnel's lack of:
. facilities
. competencies
. motivational resources
* . instructional materials and packages
. longer class periods
. ability to deal with personal problems of students

*This particular problem was listed by four or more survey subjects

TABLE VII (Continued)

PROBLEMS (RELATING TO THE STUDENTS, THE TEACHER, THE CLASSROOM, THE CURRICULA, AND THE INSTRUCTIONAL MATERIALS) ENCOUNTERED BY VOCATIONAL EDUCATION PERSONNEL WHEN WORKING WITH THE DISADVANTAGED AND/OR HANDICAPPED

Problems Encountered by Vocational Education Personnel When Working with the Disadvantaged and/or Handicapped
Problems Which Relate to Vocational Education Personnel (Continued)
. Other Vocational Education Personnel Problems:
. unable to motivate students
. difficult to secure administrators' cooperation in developing specific programs for students in need of special attention
* . unable to provide quality instruction to all groups and levels of students in class
. continually keeping oneself (teacher) motivated
Problems Which Relate to the Classroom, Curricula, and Instructional Materials
. students are "misplaced" in the curricula
* . regular textbook materials do not reach each student
. wide "student ability range" in one class
. different types of students in regular classroom
. too many students in one class--teacher unable to provide individualized instruction to each student

*This particular problem was listed by four or more survey subjects

E. Evaluation by Vocational Education Personnel of Selected Competencies Needed by Teachers Teaching the Disadvantaged and/or Handicapped

One section of the survey questionnaire was labeled "Competency Areas" and included 16 competencies which vocational and technical teachers may or may not possess. These competencies are shown in Table VIII, pages 41 to 43 .

The survey subjects were asked to rate each competency according to importance--from very important to unimportant. They were instructed to consider their positions and the need for the competency in performing their job when rating each competency.

Competencies which were considered very important were to be rated 1; competencies considered important were to be rated 2; competencies considered slightly important were to be rated 3; and competencies considered unimportant were to be rated 4.

The analysis of this questionnaire section, Competency Areas, is reported as follows:

(1) Table VIII, pages 41 to 43 , shows how the 16 competencies were rated by the survey subjects and the number of survey subject responses received by each degree of rating (very important = 1; important = 2; slightly important = 3; and unimportant = 4.)

(2) Table IX, pages 43 to 45 lists all of the competencies which received a rating of 1 (very important). These competencies are ranked according to the number of survey subject responses received by each competency--from high to low.

(3) Table X, pages 45 to 47 lists all of the competencies which received a rating of 2 (important). These competencies are ranked according to the number of survey subject responses received by each competency--from high to low.

(4) Table XI, pages 47 to 49 lists all of the competencies which received a rating of 3 (slightly important). These competencies are ranked according to the number of survey subject responses received by each competency--from high to low.

(5) Table XII, pages 50 . . . . . lists all the competencies which received a rating of 4 (unimportant). These competencies are ranked according to the number of survey subject responses received by each competency--from high to low.

All competencies except competency numbers 9, 10, and 14 were rated very important by half or by the majority of survey subjects.

Competency numbers 9, 10, and 14 were rated important by half or by the majority of survey subjects.

The competency rated very important and which received the greatest number of survey subject responses was competency no. 15 (Know how to relate to people--regardless of socio-economic level, race, color, or sex).

The competency rated very important and which received the least number of survey subject responses was competency no. 9 (Develop academic skills through vocational programs).

A summary of Table VIII, Teachers' Rating of Competencies Needed by Vocational Education Personnel When Working with the Disadvantaged and/or Handicapped, follows:

- seventy-nine percent (79%) of the survey subjects who responded to the questionnaire competency items rated competency no. 1 (Possess knowledge of the characteristics of the disadvantaged and handicapped students) very important; 18% rated it important; and 3% rated it slightly important.

- sixty-nine percent (69%) of the survey subjects who responded to the questionnaire competency items rated competency no. 2 (Identify and utilize techniques of diagnosing learning problems and needs of disadvantaged and handicapped students) very important; 25% rated it important; and 6% rated it slightly important.

- fifty percent (50%) of the survey subjects who responded to the questionnaire competency items rated competency no. 3 (Identify and manage students with mental and emotional disorders) very important; 40% rated it important; and 10% rated it slightly important.

- fifty-three percent (53%) of the survey subjects who responded to the questionnaire competency items rated competency no. 4 (Utilize guidance and counseling practices appropriate for working with disadvantaged and handicapped students) very important; 44% rated it important; and 3% rated it slightly important.

- eighty-four percent (84%) of the survey subjects who responded to the questionnaire competency items rated competency no. 5 (Possess an interest in and enthusiasm for working with the disadvantaged and handicapped students) very important; 14% rated it important; and 2% rated it slightly important.

- sixty-two percent (62%) of the survey subjects who responded to the questionnaire competency items rated competency no. 6 (Identify and utilize appropriate teaching methods especially successful with disadvantaged and handicapped students) very important; 33% rated it important; and 5% rated it slightly important.

- fifty-two percent (52%) of the survey subjects who responded to the questionnaire competency items rated competency no. 7 (Identify, evaluate, and utilize instructional materials appropriate for disadvantaged and/or handicapped students) very important; 44% rated it important; 3% rated it slightly important, and 1% rated it unimportant.

- sixty-two percent (62%) of the survey subjects who responded to the questionnaire competency items rated competency no. 8 (Plan occupational experience programs and/or laboratory experiences for disadvantaged and/or handicapped students) very important; 35% rated it important; 2% rated it slightly important; and 1% rated it unimportant.

- thirty-three percent (33%) of the survey subjects who responded to the questionnaire competency items rated competency no. 9 (Develop academic skills through vocational programs) very important; 55% rated it important; 11% rated it slightly important; and 1% rated it unimportant.

- thirty-four percent (34%) of the survey subjects who responded to the questionnaire competency items rated competency no. 10 (Identify and secure the cooperation of other agencies concerned with the welfare of the disadvantaged and/or handicapped student) very important; 55% rated it important; 10% rated it slightly important; and 1% rated it unimportant.

- fifty percent (50%) of the survey subjects who responded to the questionnaire competency items rated competency no. 11 (Identify health problems of the disadvantaged and/or handicapped students and refer students to the appropriate persons) very important; 42% rated it important; and 8% rated it slightly important.

- fifty percent (50%) of the survey subjects who responded to the questionnaire competency items rated competency no. 12 (Evaluate academic and vocational development-(progress)-of the disadvantaged and/or handicapped students) very important; 46% rated it important, and 4% rated it slightly important.

- sixty-two percent (62%) of the survey subjects who responded to the questionnaire competency items rated competency no. 13 (Manage discipline problems that may develop in working with disadvantaged and/or handicapped students) very important; 33% rated it important; 4% rated it slightly important; and 1% rated it unimportant.

- thirty-seven percent (37%) of the survey subjects who responded to the questionnaire competency items rated competency no. 14 (Possess the know-how in coordinating and utilizing community resources and services) very important; 55% rated it important; and 8% rated it slightly important.

- eighty-seven percent (87%) of the survey subjects who responded to the questionnaire competency items rated competency no. 15 (Know how to relate to people--regardless of socio-economic level, race, color, or sex) very important; and 13% rated it important.

- fifty percent (50%) of the survey subjects who responded to the questionnaire competency items rated competency no. 16 (Have practical experience via internships, externships, and student teaching or the like in preparation for teaching the disadvantaged/handicapped) very important; 44% rated it important; 5% rated it slightly important; and 1% rated it unimportant.

Using the four-point value scale (1 = very important; 2 = important; 3 = slightly important, and 4 = unimportant) means were calculated for each of the competencies rated by vocational education personnel and are shown in Table XIII, page 41.

F. Correlation of Relevant Questionnaire Items

In order to determine which questionnaire statements correlated highly (negatively or positively) with other questionnaire statements, a computer program was utilized in producing a correlation matrix of all questionnaire statements.

If two statements had a high positive correlation (+.7 or above, the survey subjects answered both statements in a similar way. If two statements had a high negative correlation (-.7 or above), the survey subjects answered the statements in a different or opposite manner.

The matrix revealed that no two statements had a high correlation (positive or negative). Those statements with a correlation of + or-.5 or above are listed in Table XIV, Page 43.

TABLE VIII (Continued)

TEACHERS' RATING OF COMPETENCIES NEEDED BY VOCATIONAL EDUCATION PERSONNEL TO WORK WITH THE DISADVANTAGED AND/OR HANDICAPPED

Competencies	Number of Survey Subject Responses Received By Ec. Rating *Degrees of Rating				
	1	2	3	4	NA
9. Develop academic skills through vocational programs.	34	56	12	1	4
10. Identify and secure the cooperation of other agencies concerned with the welfare of the disadvantaged and/or handicapped students.	36	57	10	1	3
11. Identify health problems of the disadvantaged and/or handicapped students and refer students to the appropriate persons.	53	44	8	0	2
12. Evaluate academic and vocational development-(progress)-of the disadvantaged and/or handicapped students.	53	48	4	0	2
13. Manage discipline problems that may develop in working with disadvantaged and/or handicapped students.	65	35	4	1	2
14. Possess "know-how" in coordinating and utilizing community resources and services.	39	58	8	0	2
15. Know how to relate to people--regardless of socio-economic level, race, color, or sex.	91	14	0	0	2
16. Have practical experience via internships, externships, and student teaching or the like in preparation for teaching the disadvantaged/handicapped.	53	46	5	1	2

*1 = very important; 2 = important; 3 = slightly important; 4 = unimportant; and NA = Particular questionnaire item not completed by specified number of survey subjects

TABLE VIII

TEACHERS' RATING OF COMPETENCIES NEEDED BY VOCATIONAL EDUCATION PERSONNEL TO WORK WITH THE DISADVANTAGED AND/OR HANDICAPPED

Competencies **	Number of Survey Subject Responses Received By Ec. Rating *Degrees of Rating				
	1	2	3	4	NA
1. Possess knowledge of the characteristics of the disadvantaged and handicapped students.	83	19	3	0	2
2. Identify and utilize techniques of diagnosing learning problems and needs of disadvantaged and handicapped students.	72	26	6	0	3
3. Identify and manage students with mental and emotional disorders.	52	42	10	0	3
4. Utilize guidance and counseling practices appropriate for working with disadvantaged and handicapped students.	55	46	3	0	3
5. Possess an interest in and enthusiasm for working with the disadvantaged and handicapped students.	88	15	2	0	2
6. Identify and utilize appropriate teaching methods especially successful with disadvantaged and handicapped students.	64	35	5	0	3
7. Identify, evaluate, and utilize instructional materials appropriate for disadvantaged and/or handicapped students.	55	46	3	1	2
8. Plan occupational experience programs and/or laboratory experiences for disadvantaged and/or handicapped students.	65	37	2	1	2

*1 = very important; 2 = important; 3 = slightly important; 4 = unimportant; and NA = Particular questionnaire item not completed by specified number of survey subjects

**Total number of survey subjects = 107

TABLE IX

RANKING OF COMPETENCY STATEMENTS RATED "VERY IMPORTANT" BY VOCATIONAL EDUCATION PERSONNEL

Competency No.	Competency	*Total No. Responses Received	Rank
15	Know how to relate to people--regardless of socio-economic level, race, color, or sex.	91	1
5	Possess an interest in and enthusiasm for working with the disadvantaged and handicapped students.	88	2
1	Possess knowledge of the characteristics of the disadvantaged and handicapped students.	83	3
2	Identify and utilize techniques of diagnosing learning problems and needs of disadvantaged and handicapped students.	72	4
8 & 13		65 ea.	5
8	Plan occupational experience programs and/or laboratory experiences for disadvantaged and/or handicapped students.		
13	Manage discipline problems that may develop in working with disadvantaged and/or handicapped students.		
6	Identify and utilize appropriate teaching methods especially successful with disadvantaged and handicapped students.	64	6

*Total number of survey subjects = 107

TABLE IX (Continued)

RANKING OF COMPETENCY STATEMENTS RATED "VERY IMPORTANT" BY VOCATIONAL EDUCATION PERSONNEL

Competency No.	Competency	Total No. Responses Received	Rank
4 & 7		55 ec.	7
. 4	Utilize guidance and counseling practices appropriate for working with disadvantaged and handicapped students.		
. 7	Identify, evaluate, and utilize instructional materials appropriate for disadvantaged and/or handicapped students.		
11, 12, & 16		53 ec.	8
. 11	Identify health problems of the disadvantaged and/or handicapped students and refer students to the appropriate persons.		
. 12	Evaluate academic and vocational development-(progress)-of the disadvantaged and/or handicapped students.		
. 16	Have practical experience via internships, externships, and student teaching or the like in preparation for teaching the disadvantaged/ handicapped.		
3	Identify and manage students with mental and emotional disorders.	52	9
14	Possess the "know-how" in coordinating and utilizing community resources and services.	39	10

TABLE IX (Continued)

RANKING OF COMPETENCY STATEMENTS RATED "VERY IMPORTANT" BY VOCATIONAL EDUCATION PERSONNEL

Competency No.	Competency	Total No. Responses Received	Rank
10	Identify and secure the cooperation of other agencies concerned with the welfare of the disadvantaged and/or handicapped students.	36	11
9	Develop academic skills through vocational programs.	34	12

TABLE X

RANKING OF COMPETENCY STATEMENTS RATED "IMPORTANT" BY VOCATIONAL EDUCATION PERSONNEL

Competency No.	Competency	*Total No. Responses Received	Rank
14	Possess the "know-how" in coordinating and utilizing community resources and services.	58	1
10	Identify and secure the cooperation of other agencies concerned with the welfare of the disadvantaged and/or handicapped students.	57	2
9	Develop academic skills through vocational programs.	56	3
12	Evaluate academic and vocational development-(progress)-of the disadvantaged and/or handicapped students.	48	4

*Total number of survey subjects = 107

TABLE X (Continued)

RANKING OF COMPETENCY STATEMENTS RATED "IMPORTANT" BY VOCATIONAL EDUCATION PERSONNEL

Competency No.	Competency	Total No. Responses Received	Rank
4, 7 & 16		46 ec.	5
. 4	Utilize guidance and counseling practices appropriate for working with disadvantaged and handicapped students.		
. 7	Identify, evaluate, and utilize instructional materials appropriate for disadvantaged and/or handicapped students.		
. 16	Have practical experience via internships, externships, and student teaching or the like in preparation for teaching the disadvantaged/handicapped.		
11	Identify health problems of the disadvantaged and/or handicapped students and refer students to the appropriate persons.	44	6
3	Identify and manage students with mental and emotional disorders.	42	7
8	Plan occupational experience programs and/or laboratory experiences for disadvantaged and/or handicapped students.	37	8
6 & 13		35 ec.	9
. 6	Identify and utilize appropriate teaching methods especially successful with disadvantaged and handicapped students.		
. 13	Manage discipline problems that may develop in working with disadvantaged and/or handicapped students.		

TABLE X (Continued)

RANKING OF COMPETENCY STATEMENTS RATED "IMPORTANT" BY VOCATIONAL EDUCATION PERSONNEL

Competency No.	Competency	Total No. Responses Received	Rank
2	Identify and utilize techniques of diagnosing learning problems and needs of disadvantaged and handicapped students.	26	10
1	Possess knowledge of the characteristics of the disadvantaged and handicapped students.	19	11
5	Possess an interest in and enthusiasm for working with the disadvantaged and handicapped students.	15	12
15	Know how to relate to people--regardless of socio-economic level, race, color, or sex.	14	13

TABLE XI

RANKING OF COMPETENCY STATEMENTS RATED "SLIGHTLY IMPORTANT" BY VOCATIONAL EDUCATION PERSONNEL

Competency No.	Competency	*Total No. Responses Received	Rank
9	Develop academic skills through vocational programs	12	1
3 & 10		10 ec.	2
3	Identify and manage students with mental and emotional disorders.		

*Total number of survey subjects = 107

TABLE XI (Continued)

RANKING OF COMPETENCY STATEMENTS RATED "SLIGHTLY IMPORTANT" BY VOCATIONAL EDUCATION PERSONNEL

Competency No.	Competency	Total No. Responses Received	Rank
. 10	Identify and secure the cooperation of other agencies concerned with the welfare of the disadvantaged and/or handicapped students.		
11 & 14		8 ec.	3
. 11	Identify health problems of the disadvantaged and/or handicapped students and refer students to the appropriate persons.		
. 14	Possess the "know-how" in coordinating and utilizing community resources and services.		
2	Identify and utilize techniques of diagnosing learning problems and needs of disadvantaged and handicapped students.	6	4
6 & 16		5	5
. 6	Identify and utilize appropriate teaching methods especially successful with disadvantaged and handicapped students.		
. 16	Have practical experience via internships, externships, and student teaching or the like in preparation for teaching the disadvantaged/handicapped.		
12 & 13		4	6
. 12	Evaluate academic and vocational development-(progress)-of the disadvantaged and/or handicapped students.		

TABLE XI (Continued)

RANKING OF COMPETENCY STATEMENTS RATED "SLIGHTLY IMPORTANT" BY VOCATIONAL EDUCATION PERSONNEL

Competency No.	Competency	Total No. Responses Received	Rank
. 13	Manage discipline problems that may develop in working with disadvantaged and/or handicapped students.		
1, 4 & 7		3	7
. 1	Possess knowledge of the characteristics of the disadvantaged and handicapped students.		
. 4	Utilize guidance and counseling practices appropriate for working with disadvantaged and handicapped students.		
. 7	Identify, evaluate, and utilize instructional materials appropriate for disadvantaged and/or handicapped students.		
5 & 8		2	8
. 5	Possess an interest in and enthusiasm for working with the disadvantaged and handicapped students.		
. 8	Plan occupational experience programs and/or laboratory experiences for disadvantaged and/or handicapped students.		
15	Know how to relate to people--regardless of socio-economic level, race, color, or sex.	0	9

TABLE XII

RANKING OF COMPETENCY STATEMENTS RATED "UNIMPORTANT"
BY VOCATIONAL EDUCATION PERSONNEL

Competency No.	Competency	* Total No. Responses Received	Rank
7, 8, 9, 10, 13, & 16		1	1
. 7	Identify, evaluate, and utilize instructional materials appropriate for disadvantaged and/or handicapped students.		
. 8	Plan occupational experience programs and/or laboratory experiences for disadvantaged and/or handicapped students.		
. 9	Develop academic skills through vocational programs.		
. 10	Identify and secure the cooperation of other agencies concerned with the welfare of the disadvantaged and/or handicapped students.		
. 13	Manage discipline problems that may develop in working with disadvantaged and/or handicapped students.		
. 16	Have practical experience via internships, externships, and student teaching or the like in preparation for teaching the disadvantaged/handicapped.		

*Total number of survey subjects = 107

TABLE XIII

CALCULATED *MEAN OF COMPETENCIES
(WHICH WERE RATED BY VOCATIONAL EDUCATION PERSONNEL
WHO WORK WITH THE DISADVANTAGED AND/OR HANDICAPPED)

Competency	Total Points Received	Total Survey Subject Responses	Mean
1. Possess knowledge of the characteristics of the disadvantaged and handicapped students.	130	105	1.2381
2. Identify and utilize techniques of diagnosing learning problems and needs of disadvantaged and handicapped students.	142	104	1.3653
3. Identify and manage students with mental and emotional disorders.	166	104	1.5961
4. Utilize guidance and counseling practices appropriate for working with disadvantaged and handicapped students.	156	104	1.5000
5. Possess an interest in and enthusiasm for working with the disadvantaged and handicapped students.	124	105	1.1809
6. Identify and utilize appropriate teaching methods especially successful with disadvantaged and handicapped students.	149	104	1.4326

*Each competency listed on the questionnaire was rated very important (worth 1 point); important (worth 2 points); slightly important (worth 3 points); and unimportant (worth 4 points) by the survey subjects (vocational education personnel).

TABLE XIII (Continued)

CALCULATED *MEAN OF COMPETENCIES
(WHICH WERE RATED BY VOCATIONAL EDUCATION PERSONNEL
WHO WORK WITH THE DISADVANTAGED AND/OR HANDICAPPED)

Competency	Total Points Received	Total Survey Subject Responses	Mean
7. Identify, evaluate, and utilize instructional materials appropriate for disadvantaged and/or handicapped students.	160	105	1.5238
8. Plan occupational experience programs and/or laboratory experiences for disadvantaged and/or handicapped students.	149	105	1.4190
9. Develop academic skills through vocational programs.	186	103	1.8058
10. Identify and secure the cooperation of other agencies concerned with the welfare of the disadvantaged and/or handicapped students.	184	104	1.7692
11. Identify health problems of the disadvantaged and/or handicapped students and refer students to the appropriate persons.	165	105	1.5714
12. Evaluate academic and vocational development-(progress)-of the disadvantaged and/or handicapped students.	161	105	1.5333
13. Manage discipline problems that may develop in working with disadvantaged and/or handicapped students.	151	105	1.4381

TABLE XIII (Continued)

CALCULATED *MEAN OF COMPETENCIES
(WHICH WERE RATED BY VOCATIONAL EDUCATION PERSONNEL
WHO WORK WITH THE DISADVANTAGED AND/OR HANDICAPPED)

Competency	Total Points Received	Total Survey Subject Responses	Mean
14. Possess the "know-how" in coordinating and utilizing community resources and services.	179	105	1.7047
15. Know how to relate to people--regardless of socio-economic level, race, color, or sex.	119	105	1.1333
16. Have practical experience via internships, externships, and student teaching or the like in preparation for teaching the disadvantaged/handicapped.	164	105	1.5619

*Each competency listed on the questionnaire was rated very important (worth 1 point); important (worth 2 points); slightly important (worth 3 points); and unimportant (worth 4 points) by the survey subjects (vocational education personnel).

TABLE XIV

CORRELATION OF RELEVANT QUESTIONNAIRE ITEMS

Statement	Correlation	Statement
Possess knowledge of the characteristics of the disadvantaged and handicapped students.	+.50973	Plan occupational experience programs and/or laboratory experiences for disadvantaged and/or handicapped students.
Identify and utilize appropriate teaching methods especially successful with disadvantaged and handicapped students.	+.52690	Identify, evaluate, and utilize instructional materials appropriate for disadvantaged and/or handicapped students.
Identify, evaluate, and utilize instructional materials appropriate for disadvantaged and/or handicapped students.	+.56440	Plan occupational experience programs and/or laboratory experiences for disadvantaged and/or handicapped students.
Evaluate academic and vocational development-(progress) of the disadvantaged and/or handicapped students.	+.52736	Possess the "know-how" in coordinating and utilizing community resources and services

X. Summary

This descriptive research study was conducted in order to: (1) identify the inservice needs and problems encountered by vocational education personnel working with the disadvantaged and/or handicapped, (2) identify competencies deemed very important, important, slightly important, and unimportant by vocational education personnel working with the disadvantaged and/or handicapped, (3) identify the types of teaching techniques, resource persons, and/or curriculum materials now being utilized by and helpful to vocational education personnel working with the disadvantaged and/or handicapped, and (4) identify programs and/or experiences which best prepared vocational education personnel participating in this research study for their present positions of working with the disadvantaged and/or handicapped.

The research instrument, questionnaire, was administered to 108 vocational education personnel who had been selected to participate in a graduate course (EDVT 5680--Vocational and Technical Education for the Disadvantaged) offered through the Division of Vocational and Technical Education, VPI & SU. These course participants were issued an E.P.D.A. stipend to defray tuition costs.

Of the 108 questionnaires administered, one was returned incomplete. Therefore, a total of 107 vocational education personnel responses was involved in this study.

General information obtained from the questionnaires revealed that none of the survey subjects had a doctorate degree, 26 percent had a Master's degree, three percent had achieved certificates beyond the Master's level, and the remaining seventy-one percent had

achieved at least the baccalaureate degree.

Sixty-one percent of the respondents were in the fields of agricultural education, business education and home economics.

Eighty-one percent of the survey subjects are teaching on the secondary level, 42 percent of the survey subjects have had two to five years' teaching experience on the secondary level, and 63 percent of the survey subjects have had two to five years of experience teaching the disadvantaged and/or handicapped--19 percent have had six or more years of experience teaching the disadvantaged and/or handicapped.

Seventy-five percent of the survey subjects are teaching in a mixed classroom (disadvantaged and/or handicapped students in the same classroom with regular students); seventy percent of the survey subjects have a class size of 16 or more students, 39 percent of the survey subjects teach students who are 15 or 16 years of age, and 32 percent of the survey subjects teach students who are 17 years of age or over.

The questionnaire section concerning the survey subjects' ranking of experiences and/or programs which best prepared them for their present positions of working with the disadvantaged and/or handicapped was filled in by 32 survey subjects.

All of the 32 vocational educators had one experience and/or program which best prepared them for their present position of working with the disadvantaged and/or handicapped; twenty-four of the 32 survey subjects revealed having had two experiences and/or programs which prepared them for their present position of working with the disadvantaged and/or handicapped; fourteen of the 32 had three experiences and/or programs; eleven of the 32 have had four

kinds of experiences and/or programs; five of the 32 have had five experiences and/or programs; four of the 32 have had six experiences and/or programs; and one of the 32 has had seven experiences and/or programs which best prepared him for his present position of working with the disadvantaged and/or handicapped.

Fifty percent of the survey subjects responding to this questionnaire section indicated that "university courses" (on adult education, disadvantaged child, early childhood development, educating the disadvantaged, and industrial arts) and "work experience" had best prepared them for their present position of working with the disadvantaged and/or handicapped, and both receiving a 1 ranking (the program which best prepared the survey subject for his present position of working with the disadvantaged and/or handicapped was to receive a 1 ranking; the experience or program which was considered the next best in preparing the survey subject for his present working position was to receive a 2 ranking, etc.)

The experience or program listed secondly and thirdly by the majority of vocational personnel as preparing them for their present positions of working with the disadvantaged and/or handicapped and which received a ranking of 2 and 3 was the "survey subjects own readings on the disadvantaged and/or handicapped."

The experience or program, "intern teaching experience in disadvantaged and/or handicapped programs," received a ranking 1, 2, & 3; on the other hand, the experience or program, "inservice program relating to disadvantaged and/or handicapped sponsored by a local school system, received a 1, 2, 3, 4, & 5 ranking by one or several survey subjects.

The experience or program, "inservice program related to disadvantaged and/or handicapped sponsored by the State Dept.," received a 1, 2, 3, & 4 ranking by vocational education personnel; and the experience or program, "inservice program related to disadvantaged and/or handicapped sponsored by a university," received a 1, 2, & 4 ranking.

Vocational education personnel ranked the experience or program, "university courses in Special Education," 1, 3, 5, & 6; and the experience or program, "consultant," received a 1, 2, 3, 4 & 6.

The vocational education personnel surveyed employ various teaching techniques and utilize many different types of curriculum materials when working with the disadvantaged and/or handicapped.

Demonstrations and individualized instruction were listed by more than 20 respondents as being teaching methods employed by them in their classrooms when working with the disadvantaged and/or handicapped. Audio-visual aids, field trips, films, games, hands-on activities, and guest speakers were listed by ten or more vocational teachers as being effective teaching methods, strategies, or materials to be utilized when working with the disadvantaged and/or handicapped.

Teaching techniques and/or curriculum materials and equipment listed by three to nine vocational education personnel as being helpful to them when working with the disadvantaged and handicapped were: film strips, lab and shop experience, open discussion, overhead projector, projects, role playing, slides, and students working together.

Teaching techniques and/or curriculum materials and equipment listed by one or two vocational education personnel as being helpful to them when working with the disadvantaged and/or handicapped were: activity-centered lessons, audio (self-study) units, computer assisted

instruction (CAI), case studies, contests, contract learning, competitive acts, clubs, exhibits, experiments, extension bulletins, home visitation, hospital inservice programs, learning by doing, learning about students' background, lecture followed by practice, oral examinations, panel discussions, practical experiences, publications, questionnaires, raising money for field trips, rapping (bull sessions), reading assignments, repetition, show and tell, short class duration, skill emphasis, slow pace, behavioral objectives, study guides, tape recorder, teacher-made materials, testing, trial and error, tutoring, video-tape equipment, work experiences, work packets, workbooks, and workshops.

Vocational education personnel rated the following list of competencies needed by vocational education teachers teaching the disadvantaged and/or handicapped:

1. Possess knowledge of the characteristics of the disadvantaged and handicapped students.
2. Identify and utilize techniques of diagnosing learning problems and needs of disadvantaged and handicapped students.
3. Identify and manage students with mental and emotional disorders.
4. Utilize guidance and counseling practices appropriate for working with disadvantaged and handicapped students.
5. Possess an interest in and enthusiasm for working with the disadvantaged and handicapped students.
6. Identify and utilize appropriate teaching methods especially successful with disadvantaged and handicapped students.
7. Identify, evaluate, and utilize instructional materials appropriate for disadvantaged and/or handicapped students.
8. Plan occupational experience programs and/or laboratory experiences for disadvantaged and/or handicapped students.
9. Develop academic skills through vocational programs.

10. Identify and secure the cooperation of other agencies concerned with the welfare of the disadvantaged and/or handicapped students.

11. Identify health problems of the disadvantaged and/or handicapped students and refer student to the appropriate persons.

12. Evaluate academic and vocational development-(progress)-of the disadvantaged and/or handicapped students.

13. Manage discipline problems that may develop in working with disadvantaged and/or handicapped students.

14. Possess "know-how" in coordinating and utilizing community resources and services.

15. Know how to relate to people--regardless of socio-economic level, race, color, or sex.

16. Have practical experience via internships, externships, and student teaching or the like in preparation for teaching the disadvantaged and/or handicapped.

All of the competencies except competency numbers 9, 10 and 14 were rated very important. These three foregoing competencies were rated important by the majority of survey subjects.

A sample of salient problems encountered by vocational education persons when working with the disadvantaged and/or handicapped include: (1) students' lack of motivation, (2) students' poor attendance, (3) students' personal problems, (4) lack of instructional materials and packages, (5) teacher's inability to provide quality instruction to all students, and (6) the inability of regular textbook materials to reach each student.

Other problems encountered by individual vocational education personnel were: student behavioral problems, students' low reading ability, lack of time for research and planning, need for longer class periods, students are "misplaced" in the curricula, etc.

XI. Conclusions

As a consequence of this study, the following conclusions were

drawn:

1. Only 32 of the 107 vocational education personnel responded to the section of the questionnaire relating to the ranking of programs and/or experiences which best prepared vocational teachers working with special needs persons for their present positions. The small number of vocational personnel responses suggests that (a) the majority of the respondents have had no beneficial experiences and have not participated in any worthwhile programs which have prepared them for their present position of working with the disadvantaged and/or handicapped, (b) few of the respondents have had some beneficial experiences or have participated in some worthwhile programs which have prepared them for their present position of working with the disadvantaged and/or handicapped, or (c) the instructions for this particular questionnaire section was not understood by the majority of the respondents(which would not appear to have been the case in view of the pilot test to which the instrument was subjected).

2. Most experiences and/or programs listed by vocational education personnel as having prepared them for their present position of working with the disadvantaged and/or handicapped were those experiences and/or programs which the survey subjects naturally encountered during their educational or work experience background; such as, university courses in various areas and their own readings on the disadvantaged and/or handicapped.

3. Inservice programs sponsored by a local school system, state department, or university, and consultants were not listed by the majority of survey subjects as preparing them for their present position but were listed by only a few or small minority of survey subjects.

The probable reasons for this small listing and ranking of inservice programs sponsored by a local school system, state department, or university, and consultants may be attributed to: (a) lack of financial support from the school system for inservice programs; money was not budgeted for inservice programs, (b) the work schedule of vocational education personnel; it is difficult for those working with the disadvantaged and/or handicapped to secure "time off" from their jobs to attend an inservice program and many vocational education personnel are employed on a 12-months basis--eliminating their opportunity to attend summer inservice programs, (c) many vocational education

administrators and personnel do not realize the need of inservice programs; they feel they have adequate skills, and (d) some school districts, universities, and state departments do not offer inservice programs for vocational education personnel working with the disadvantaged and/or handicapped.

4. Although many of the survey subjects listed individualized instruction as one type of teaching method employed in their classrooms, the fact that the types of individualized instruction and learning packages were not mentioned suggests the probability that many vocational teachers have never been formally introduced to the strategies behind the effective development and implementation of this teaching technique.

5. Most of the teaching techniques and/or curriculum materials and equipment listed by vocational education personnel as being helpful to them and employed by them when working with the disadvantaged and/or handicapped were referenced only once or twice. This suggests that these techniques, curriculum materials, and equipment (listed only once or twice) are not widely utilized by vocational education personnel when working with the disadvantaged and/or handicapped. Some examples of these techniques and materials not widely utilized are computer assisted instruction (CAI), case studies, exhibits, home visitation, panel discussion, show and tell, behavioral objectives, tape recorder, and video tape equipment. Most likely the reason CAI and video tape equipment are not being utilized by more than two of the respondents is because of the expense involved in implementing these strategies into a classroom situation.

The other techniques, materials, and equipment mentioned in the foregoing paragraph are probably not utilized by more vocational teachers because: (a) these materials are not available in the school, (b) these materials are too expensive to purchase, (c) the teacher is not familiar with certain teaching techniques and does not know how to organize these techniques in order for them to compliment the subject matter, (d) the teacher does not have time to prepare teacher-made materials, does not have time for home visitation, and does not have time to prepare case studies, (e) teacher's educational background has not involved the usage of certain teaching techniques; they have

never seen a certain teaching technique effectively utilized, and (f) the teacher is not aware of the many advantages to be derived from these techniques, materials, and equipment when utilized in classes for the disadvantaged and/or handicapped.

6. All of the competencies listed on the questionnaire except 9, 10, and 14 were rated very important by the majority of survey subjects. Competencies 9, 10 and 14 were rated important by the majority of survey subjects.

Competency 5 (possess an interest in and enthusiasm for working with the disadvantaged and handicapped students), competency 13 (manage discipline problems that may develop when working with the disadvantaged and/or handicapped students), and competency 15 (know how to relate to people--regardless of socio-economic level, race, color, or sex) are related to the teacher's affective domain; these competencies require the teacher to show emotions and feelings when trying to develop or change attitudes. Because these competencies (5, 13, and 15) were rated "very important" by a large majority of survey subjects, these basic conclusions can be drawn:

a. persons who presently teach or propose to teach the disadvantaged and/or handicapped student should possess the ability to relate and communicate feelings effectively with people (young, old; administrators, students, teachers; male, females; Chicanos, Blacks, etc.). The word people used in the foregoing sentence can be further dichotomized to include the descriptors disadvantaged (socially, economically, academically, and culturally) and handicapped (mentally, emotionally, and physically.

If effective teaching and learning is to occur, this ability to relate and communicate with everyone must be perfected and positive student attitudes must be established in order that negative student beliefs ("I can't succeed") and negative student attitudes ("I hate Blacks") can be abolished or exchanged for a more favorable belief, attitude, behavior, or value.

b. persons who presently teach or propose to teach the disadvantaged and/or handicapped must possess a genuine interest in and be enthusiastic about teaching these types of students. Many beginning teachers who enter a classroom of disadvantaged and/or handicapped students are "bubbling over" with enthusiasm and interest, however, in a few weeks the "bubbling over spirit" is exchanged for an "indifferent" attitude. Perhaps this exchange has been created because of the paperwork, the lack of time for class preparation, too many students, lack of equipment and visual aids, lack of classroom experience, lack of motivation (teacher as well as student), etc. When this negative, defeatist attitude appears, it's time for teacher retrospection. It's up to this teacher to review what has happened to cause the "teacher slump and depression." Only after a careful evaluation can new goals or objectives be set; interest, enthusiasm, and teacher motivation stimulated; and the problem cured.

Perhaps the teacher should attend special classes relating to working with the disadvantaged and/or handicapped student; read books, articles, journals on teaching techniques, reaching the disadvantaged and/or handicapped student, etc.; do case studies on students; talk with colleagues about the problems, etc. There are many steps to be taken. The thing to remember is--do something. One never gets anywhere by sitting still; one simply deteriorates.

c. persons who presently teach or propose to teach the disadvantaged and/or handicapped student must possess the ability to handle discipline problems that may develop. The catch words are "problems that may develop." A teacher may be classified as "effective," "excellent," and still have discipline problems--especially when teaching the disadvantaged and/or handicapped. One cannot forget that the handicapped student may be emotionally disturbed. This type of student is often under psychiatric care. Therefore, to say that all discipline problems in the classroom can be eliminated is inappropriate. However, one can say that discipline problems can be minimized. Keeping students active, enthusiastic, and motivated minimizes discipline problems. We have all heard this, and if we are realistic, we will admit it is true. The only thing that remains unrealistic is "how do we keep students active, enthusiastic, and motivated?" Referring back to conclusion b., it is the teacher's responsibility. If Plan A does not work, try Plan B. If Plan B does not work, try Plan C. The main idea is to keep trying. Each student is different and must be handled differently, therefore, the teacher needs to: (1) find out how each student is different--from student's folder in guidance office, through home visitations, through classroom interaction with the student, (2) attempt to reach each student by using different teaching techniques, (3) attempt to change unfavorable attitudes by being an example for the students and incorporating into daily lesson plans activities

which have as their objective the changing of unfavorable attitudes, (4) impart skills, (5) evaluate and re-evaluate teacher effectiveness and accomplishment as applied to reaching each student, and (6) never be satisfied with present success; strive for greater success.

XII. Recommendations

Based upon the findings and conclusions inferred from the study, the following recommendations are offered:

1. Teacher education personnel in vocational-technical education should continue plans for initiating inservice programs for vocational educators working with the disadvantaged and/or handicapped.

2. Teacher educators should design or modify courses to develop those competencies in this study which were rated very important and important by vocational education personnel working with the disadvantaged and/or handicapped.

3. Based upon the competencies identified, as well as those competencies recognized in similar studies, teacher educators need to develop a competency based instructional system for training vocational teachers in the skills necessary for dealing with:

    A. The disadvantaged

        1. Socio-economically
        2. Culturally
        3. Academically

    B. The handicapped

        1. Mentally
            a) severely retarded
            b) moderately retarded
            c) mildly retarded
        2. Physically
            a) orthopedically handicapped
            b) visually handicapped
            c) speech impaired
            d) hearing impaired

4. School systems should plan for flexible budgets which allow for financial support of inservice workshops and programs relating to the training of vocational education personnel for working with the disadvantaged and/or handicapped.

5. Colleges, universities, and the state department should make available consultants for inservice workshops relating to the training of vocational education personnel working with the disadvantaged and handicapped.

6. Vocational education personnel should become familiar with, utilize, and experiment with various teaching techniques which can be employed in the classroom for the disadvantaged and/or handicapped.

7. Vocational education personnel should express to administrators in higher education the need for courses relating to working with the disadvantaged and/or handicapped.

8. Vocational education personnel working with the disadvantaged and/or handicapped in a mixed or regular classroom should have a smaller teacher-pupil ratio than vocational education personnel working with students who are not disadvantaged and/or handicapped.

9. Persons preparing or retraining in order to work with the disadvantaged and/or handicapped should receive vicarious experiences and in the actual environment, i.e., inner-city, Indian reservation and Appalachian hollows in a program for the disadvantaged and/or handicapped.

10. Further collaborative efforts are needed between special and vocational education to maximize both learning and employment opportunities for mentally and physically handicapped persons.

11. Teacher education programs should provide more frequent exposure to remedial and diagnostic procedures and to methods for individualizing instruction. Strategies for classroom control and management must also be devised.

12. There must be more opportunities for pre-service experiences with community agencies whose range allows for more insight into the life styles of disadvantaged students, and, therefore, greater empathy for their difficulties.

13. Programs to prepare or educate vocational education personnel for the inner-city, Mexican barrios, enclaves of Puerto Rico, and Indian reservations must be done so on the advice of the culturally different living in that cultural environment.

14. Greater emphasis must be placed on recruiting teachers from the ranks of those to be served.

15. Since teacher attitudes can have a profound impact on students' perceptions, academic performance, self concepts and beliefs, helping teachers develop more positive attitudes toward ethnic minorities or the culturally different and their cultures.

16. Further research needs to be initiated in identifying problems encountered by and competencies needed by vocational education personnel working with the disadvantaged and/or handicapped.

A P P E N D I X

- Research Instrument

Division of Vocational and Technical Education
College of Education
VPI and SU
Blacksburg, Virginia

A SURVEY OF COMPETENCIES NEEDED AND
INSERVICE PROBLEMS OF VOCATIONAL AND TECHNICAL EDUCATION
TEACHERS TEACHING THE DISADVANTAGED AND HANDICAPPED IN VIRGINIA

Name _____

School _____

Number of years taught:
a. elementary _____
b. secondary _____
c. post-secondary _____

Do you teach disadvantaged and/or handicapped students? Please check.

Disadvantaged _____ Handicapped _____ Both _____

Are your disadvantaged and/or handicapped students in a self-contained class or are they mixed with students that are not disadvantaged and/or handicapped (regular vocational classes)? Please check.

Self-contained _____ Mixed _____

What is your average class size? Number of students _____

How many years have you taught disadvantaged and/or handicapped students? _____

What is the average age and grade level of your students?

Age _____ Grade level _____

List your college degree(s) and major field of specialization.

	Degree	Field of Specialization
1.	_____	_____
2.	_____	_____
3.	_____	_____

Hours beyond highest degree held? _____ Field of Specialization _____

Indicate the type of certificate(s) held.

_____

_____

What do you feel to be <u>your</u> greatest problem on a day-to-day basis in your program?

_____

_____

_____

COMPETENCY AREAS

Based upon your present teaching position, evaluate the importance of the following list of competencies. Consider your position and the need for the competencies for performing successfully in your position. Your evaluation should be based upon a four point ranking system:

very important	slightly important
important	unimportant

The list of competencies will end with a section labeled "Other." This section is included because the competency list may not be inclusive. Feel free to add the additional competencies you feel are important in your position.

COMPETENCIES	Very Important	Important	Slightly Important	Unimportant
1. Possess knowledge of the characteristics of the disadvantaged and handicapped students.	( )	( )	( )	( )
2. Identify and utilize techniques of diagnosing learning problems and needs of disadvantaged and handicapped students.	( )	( )	( )	( )
3. Identify and manage students with mental and emotional disorders.	( )	( )	( )	( )
4. Utilize guidance and counseling practices appropriate for working with disadvantaged and handicapped students.	( )	( )	( )	( )
5. Possess an interest in and enthusiasm for working with the disadvantaged and handicapped students.	( )	( )	( )	( )
6. Identify and utilize appropriate teaching methods especially successful with disadvantaged and handicapped students.	( )	( )	( )	( )
7. Identify, evaluate, and utilize instructional materials appropriate for disadvantaged and/or handicapped students.	( )	( )	( )	( )
8. Plan occupational experience programs and/or laboratory experiences for disadvantaged and/or handicapped students.	( )	( )	( )	( )
9. Develop academic skills through vocational programs.	( )	( )	( )	( )

COMPETENCIES	Very Important	Important	Slightly Important	Unimportant
10. Identify and secure the cooperation of other agencies concerned with the welfare of the disadvantaged and/or handicapped students.	( )	( )	( )	( )
11. Identify health problems of the disadvantaged and/or handicapped students and refer students to the appropriate persons.	( )	( )	( )	( )
12. Evaluate academic and vocational development - (progress) of the disadvantaged and/or handicapped students.	( )	( )	( )	( )
13. Manage discipline problems that may develop in working with disadvantaged and/or handicapped students.	( )	( )	( )	( )
14. Possess the "know-how" in coordinating and utilizing community resources and services.	( )	( )	( )	( )
15. Know how to relate to people--regardless of socio-economic level, race, color or sex.	( )	( )	( )	( )
16. Have practical experience via internships, externships and student teaching or the like in preparation for teaching the disadvantaged/handicapped.	( )	( )	( )	( )
17. Other _____	( )	( )	( )	( )
_____	( )	( )	( )	( )

Thank you.

What teaching techniques, resource persons, and/or curriculum materials have you found in general to be most helpful in working with handicapped or disadvantaged youth?

_____

_____

_____

Would you be interested in serving as a consultant (guest speaker) for a disadvantaged/handicapped program?

_____ Yes _____ No

_____ Unable to at the present time but may be interested in future.

If you respond "yes," what topic do you feel confident to lead a discussion on?

_____

_____

Have you had any special preparation for your present work with the disadvantaged and/or handicapped?

_____ Yes _____ No

If yes, please rank the following.

Please rank the programs and/or experiences which best prepared you for your work with disadvantaged and/or handicapped students. (Give a rank of (1) for that program and/or experience that best prepared you, and rank of (2) for the next best, etc.) Please do not duplicate numbers in ranking of programs and/or experiences.

( ) In-service program related to disadvantaged and handicapped sponsored by local school system.
( ) In-service program related to disadvantaged and handicapped sponsored by State Department.
( ) In-service program related to disadvantaged and handicapped sponsored by a university.
( ) University courses in special education.
( ) University courses in _____(specify area).
( ) Intern teaching experience in disadvantaged and/or handicapped programs.
( ) Your own readings on disadvantaged and/or handicapped.
( ) Consultants.
( ) Military experience.
( ) Other - Industry, Business, etc. _____(specify).

XIV. Bibliography

Breathill, Edward T. "The Status of Rural America." Paper presented at the National Outlook Conference on Rural Youth, Washington, D. C. October 23-26, 1967, 6 pp.

Clifford, Virginia I. Urban Education. New York: Union Theological Seminary, 1964.

Danis, Hazel. "Profile of the American Public School Teachers, 1966." NEA Journal, LVI (May, 1967), 12.

Fairfield, R. P. Teacher Education: What Design? The Antioch-Putney Graduate School Report, Updating, Fall, 1967, No. 1.

Feck, Vincent J. "A Review and Survey of Literature, Research, and Programs Pertaining to Teaching Disadvantaged and Handicapped," Project Report, Bureau of Vocational Education, June, 1972, Frankfort, Kentucky.

Gordon, E. and Wilkerson, D. A. Compensatory Education for the Disadvantaged. Princeton, N. J.: CEEB, 1966.

Green, Robert L. "Crisis in American Education: A Racial Dilemma." Paper prepared for National Conference in Equal Educational Opportunity in America's Cities, sponsored by the U. S. Commission on Civil Rights, Washington, D. C., November, 1967.

Kopp, William F. "The BOCES Mandate to Serve Rural Disadvantaged" American Vocational Journal, November, 1970, Vol. 45, No. 8.

Morrison, Virginia B. and Roy, William J. WEXPO-9: An Experimental Approach to the Preparation of Elementary School Teachers for Inner-City Schools, Phase I. Detroit: Wayne State University, 1968.

Obrien, Nancy. "Preparing Elementary Teachers for Culturally Disadvantaged Schools." Paper presented at the Conference honoring Florence B. Stratemeyer, French Lick, Indiana, June 10-12, 1965.

Passow, Harry A. Toward Creating A Model Urban School System: A Study of the Washington, D. C. Public Schools. New York: New York Teacher College, Columbia University, 1967.

Whitten, Benjamin. "What Makes an Effective Vocational Education Teacher in an Inner-City--A Supervisor's Point of View." Third Annual National Voc/Tec Seminary Proceedings, October 20-23, 1969, Miami Beach, Florida. Columbus, Ohio: CVTE, The Ohio State University, January, 1970, 128 pp.